Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A gas burner, ~~said burner~~ comprising:

a metal burner membrane,

wherein said membrane of the gas burner comprises ~~comprising~~ a base section having a smallest radius of curvature being R_{base}, ~~and~~ a closing section, and ~~characterised in that said membrane being uninterrupted comprises~~ a transition region ~~for~~ connecting said base section to said closing section,

wherein said membrane is uninterrupted, and

wherein said transition region has ~~having~~ a smallest radius of curvature $r_{transition}$ being larger than zero and being smaller than ~~or equal to~~ said R_{base}.

2. (Currently Amended) A gas burner as in claim 1, wherein said membrane comprises a fabric comprising stainless steel ~~fibres~~ fibers.

3. (Currently Amended) A gas burner as in claim 2, wherein said stainless steel ~~fibres~~ fibers are arranged essentially parallel into bundles.

4. (Original) A gas burner as in claim 3, wherein said bundles are knitted or braided or woven.

5. (Currently Amended) A gas burner as in claim [[1]] 2, wherein said membrane further comprises a foraminated plate, a foraminated [[or]] sheet, or a deep drawn or stamped wire mesh for supporting said fabric.

6. – 9. (Canceled)

10. (Currently Amended) A gas burner as in claim [[1]] 5, wherein said base section has a frustoconical shape.

11. (Currently Amended) A gas burner as in claim [[1]] 5, wherein said base section has a cylindrical shape.

12. (Currently Amended) A gas burner as in claim 10, wherein said transition region is part of a torus surface delimited by two planes perpendicular to an ~~the~~ axis of symmetry of said torus.

13. (Currently Amended) A gas burner as in claim [[1]] 5, wherein said base section has a polygonal cross section, the corners of said cross section being rounded.

14. (Currently Amended) A gas burner as in claim [[1]] 5, wherein said base section has a rectangular cross section, the corners of said cross section being rounded.

15. (Currently Amended) A gas burner as in claim [[1]] 5, wherein said base section is a truncated pyramid, said pyramid having rounded edges.

16. (New) A gas burner as in claim 12, wherein said closing section is a small inverted sphere cap such that a depression forms at a center of said burner membrane.

17. (New) A gas burner as in claim 11, wherein said transition region is part of a torus surface delimited by two planes perpendicular to an axis of symmetry of said torus.

18. (New) A gas burner as in claim 11, wherein said transition region is in a form of a circular ridge.

19. (New) A gas burner as in claim 1, wherein the gas burner is configured such that gas penetrates the membrane before being ignited and flames are visible.

20. (New) A gas burner as in claim 3, wherein said membrane further comprises a foraminated plate, a foraminated sheet, or a deep drawn or stamped wire mesh for supporting said fabric.

21. (New) A gas burner as in claim 4, wherein said membrane further comprises a foraminated plate, a foraminated sheet, or a deep drawn or stamped wire mesh for supporting said fabric.

22. (New) A gas burner as in claim 1, wherein the smallest radius of curvature R_{base} of the base section and the smallest radius of curvature $r_{transition}$ of the transition region follow the following relation: $0.1 \times R_{base} \leq r_{transition} \leq 0.7 \times R_{base}$.

23. (New) A gas burner as in claim 1, wherein the smallest radius of curvature R_{base} of the base section and the smallest radius of curvature $r_{transition}$ of the transition region follow the following relation: $0.2 \times R_{base} \leq r_{transition} \leq 0.5 \times R_{base}$.